Title (en)

System and methods for feature selection and matching

Title (de)

System und Verfahren zur Featureauswahl und -anpassung

Title (fr)

Système et procédés de sélection de caractéristiques et d'adaptation

Publication

EP 2738517 B1 20160413 (EN)

Application

EP 13190969 A 20131030

Priority

US 201213692436 A 20121203

Abstract (en)

[origin: EP2738517A1] Systems and methods for feature selection and matching are provided. In certain embodiments, a method for matching features comprises extracting a first plurality of features from current image data acquired from at least one sensor and extracting a second plurality of features from a prior map, wherein the prior map represents an environment containing the navigation system independently of data currently acquired by the at least one sensor. The method also comprises identifying at least one first feature in the first plurality of features and at least one second feature in the second plurality of features that have associated two-dimensional representations; and identifying at least one corresponding pair of features by comparing a three-dimensional representations of the at least one first feature to a three-dimensional representation of the at least one second feature.

IPC 8 full level

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CPC (source: EP US)

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Cited by

CN111279386A; US2023393276A1; US12092742B2; US11748860B2; WO2019084898A1; TWI713922B

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